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**Synergent Technologies**

5301 Buckeystown Pike  
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Frederick MD 21704

12 January 2003

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

ORIGINAL

**Re: Written Ex Parte Presentation in ET Docket 98-153**

Dear Ms. Dortch

I am providing the following comments in support of the Petition for Reconsideration submitted by Multispectral Solutions, Inc ("MSSI") in the above referenced docket.

I am the author of Agilent Technologies' application note entitled "Radar Pulse Measurements with a Spectrum Analyzer". This document is referenced in **Agilent Measurement Solutions - Issue 1, Volume 3<sup>1</sup>** to assist Agilent customers in the proper use of a spectrum analyzer to measure wideband pulse parameters. Please note that Agilent now refers its customers to **this** document to better understand the phenomenon of pulse desensitization. The predecessor document, HP Application Note 150-2 "Spectrum Analysis of Pulsed RF", is no longer in print but is currently scheduled for revision. I am working with Agilent to update the entire 150 series of application notes.

**Also**, I was the co-author of **three** one-day seminars presented by Agilent: 'Radar Measurement Basics', 'Advanced Radar Measurements', and 'Digital Communication Measurements'. Each of the seminars **has** been delivered at over **35** cities worldwide. I have personally delivered each of the seminars **twenty** times to over 1000 engineers.

As **an** expert in the field of spectrum analysis and wideband measurements with over 25 years of experience, 20 years with HP/Agilent in the development of test equipment and procedures for wideband signals, I believe that I am eminently qualified to comment on the correct use of pulse desensitization correction (PDC).

Specifically, I **agree** with the argument made by Multispectral Solutions, Inc. (MSSI) in its Petition for Reconsideration that PDC is not required to determine the potential interference effects of a wideband pulse waveform. Rather, pulse power **density** (i.e.,

<sup>1</sup> [http://www.tmintl.agilent.com/npl/tandm\\_news.shtml](http://www.tmintl.agilent.com/npl/tandm_news.shtml)

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interference effects of a wideband pulse waveform. Rather, pulse power *density* (i.e., Watts per Hz, dBm/MHz, etc.), whether determined on an average or peak basis, is the relevant parameter of importance.

Respectfully submitted,



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